

NONCOMPLIANCE TRACKING SYSTEM

INTRODUCTION

The purpose of this article is to describe the reporting requirements outlined in the Price Anderson Amendments Act (PAAA) Noncompliance Tracking System program.

The DOE Office of Enforcement and Investigation is responsible for the enforcement of nuclear safety regulations applicable to the Department of Energy's (DOE) indemnified contractors. They have established the internet-based Noncompliance Tracking System (NTS). This system is to be used by the PAAA Coordinator or alternate for the submission and tracking of potential regulatory non-compliances exceeding thresholds specified by DOE and to develop effective corrective actions to prevent their recurrence. Prompt identification, reporting to DOE, and timely correction of non-compliances may provide DOE with a basis to exercise discretion to mitigate civil penalties, and suspend the issuance of Notices of Violation for certain violations.

This chapter describes the identification and reporting of radiation protection and worker health and safety non-compliances. It also identifies threshold reporting criteria intended to be consistent with guidance provided by the DOE. Reporting criteria is also derived from portions of DOE Order 232.1A, Occurrence Reporting and Processing of Operations Information, and its attendant Manual.

Potential non-compliances beneath those thresholds are tracked through the ESHTRK database (see [FESHM 1040.1](#)) and the Significant Events Log.

DEFINITIONS

Computerize Accident Incident Recordkeeping and Reporting System (CAIRS) - An on-line DOE database utilized to capture issues pertaining to workplace injuries.

Occurrence Report and Processing System (ORPS) – An online DOE database used to report on incidents and events that meet or exceed criteria listed in DOE M231.1-2, "Occurrence Reporting and Processing of Operations Information", August 2003.

Environment, Safety and Health Tracking System (ESHTRK) - Fermilab's internal database tracking system to track non-compliance issues beneath the NTS threshold.

Noncompliance Tracking System (NTS) – An online DOE database used to report potential regulatory non-compliances exceeding thresholds specified by DOE.

Significant Events Log – An on-line record maintained by the PAAA and Alternate for the purpose of capturing significant events/issues that may qualify for reporting under CAIRS, ORPS, NTS.

RESPONSIBILITIES

The Associate Head of the ES&H Section responsible for the Radiation Protection Program is responsible for

- Serving as a co-PAAA Coordinator as designated by the ES&H Director for radiological matters
- Employing a number of venues and methods to identify problems in the Radiation Protection Program to evaluate them for possible compliance issues.
- Periodically providing orientation on the PAAA reporting system and enforcement procedures to senior management staff and Radiological Control Organization personnel.
- Consulting with the ES&H Director and other ES&H Section staff to identify and implement additional reporting of radiological events under ORPS (see [FESHM Chapter 3010](#)) and to any external agencies under applicable requirements and regulations.
- Conducting discussions at regular meetings of Laboratory Management, ES&H professionals, the Laboratory Safety Committee and its subcommittees including the Radiation Safety Subcommittee
- Reviewing notifications of events and issues as they arise by laboratory management, professional ES&H staff lab-wide, and other concerned

individuals, including reports received through the Laboratory's Employee Concerns Program.

- Responding to observations made by members of the DOE-Fermi Site Office (DOE-FSO) and other DOE officials, and related follow-up activities of the line organization and the Radiological Control Organization staff.
- Reviewing occurrences and programmatic issues identified at other facilities.
- Reviewing results of formal assessments and ESHTRK entries.
- Determining need for formal investigations, reports and entries to the Significant Event Log, and the NTS.
- Approving final investigation reports that involve potential PAAA non-compliances.
- Reviewing corrective action as reports are submitted to DOE.
- Designating an alternate PAAA-Coordinator for radiological matters.

The Deputy Head for the ES&H Section is responsible for:

- Serving as a co-PAAA Coordinator for worker safety and health matters as designated by the ES&H Director.
- Consulting with the ES&H Director and other ES&H Section staff to identify and implement additional reporting of Worker Safety and Health Program under ORPS (see [FESHM Chapter 3010](#)) and to any external agencies under applicable requirements and regulations.
- Conducting discussions at regular meetings of Laboratory Management, ES&H professionals, the Laboratory Safety Committee and its technical subcommittees, including the Senior Safety Officer subcommittee.
- Reviewing notifications of events and issues as they arise to laboratory management, professional ES&H staff lab-wide, and other concerned individuals, including reports received through the Laboratory's Employee Concerns Program
- Responding to observations made by members of the DOE-FSO and other DOE officials, and related follow-up activities of the line organization and the ES&H Section.
- Reviewing occurrences and programmatic issues identified at other facilities.
- Reviewing results of formal assessments and ESHTRK entries.
- Determining need for formal investigations, reports and entries to the Significant Event Log, and NTS.
- Approving final investigation reports that involve potential PAAA non-compliances.
- Reviewing corrective action as reports are submitted to DOE.

- Designating an alternate PAAA-Coordinator for worker safety and health matters.

PAAA- Coordinator or Alternate is responsible for:

- Entering non-compliances into the NTS.
- Conducting a quarterly review of reported incidents, inspection reports, and program reviews to identify programmatic trends which need to be screened for NTS submission, and notifying the PAAA Coordinator and/or Alternate.
- Inputting any audit, review or trending analysis which meets NTS reporting requirements.
- Coordinating through the host Division/Center/Section for information review.
- Ensuring forms are completed in a timely manner.
- Tracking corrective actions and closing them out in NTS upon receiving report by the Division/Center/Section.

Division/Center/Section (D/S) Heads are responsible for

- Notifying one of the co-PAAA Coordinators or Alternates of any incident or program review that may meet the threshold for reporting through the NTS.
- Conducting investigation into the incident, consulting with the one of the co-PAAA Coordinators or Alternates providing sufficient information within the allotted time for the submission of the base report (CAIRS, ORPS or NTS).
- Assuring all corrective actions are placed into ESHTRK and coordinating the implementation of all corrective actions. See [FESHM 1040.1](#) for additional information.
- Assuring the NTS Coordinator is kept apprised of the closing of ESHTRK items or changing of tentative completion dates.
- Providing the NTS Coordinator with citations as to what rules/regulations were violated.

PROCEDURE

On discovery of an event, the Division/Center/Section should utilize the flowchart in Appendix B to aid in determining the reporting requirements.

Any CAIRS or ORPS events that meet the reporting criteria identified in Appendix A will have a NTS report initiated upon the completion of the CAIRS report or the filing of the final ORPS.

If as a result of audits, assessments, evaluations or data review issues are identified meeting NTS criteria, then submission will be required and coordinated between the ES&H Section and the affected d/s.

Findings/issues identified as a result of an audit/assessment, CAIRS or ORPS will be entered into ESHTRK for tracking. These items will also be included in the NTS report.

NTS Filing Process

1. The co-PAAA Coordinator or Alternate will initiate the NTS filing process.
2. Information required for the NTS report will be taken directly from:
 - a. ORPS or CAIRS report;
 - b. Issues identified by means of formal audits that are not routine monitoring and inspection activities of the Radiological Control Organization;
 - c. Repetitive issues identified during formal or informal audits and reviews, even minor ones, that could possibly be indicative of systematic, rather than isolated failure to properly implement the Radiation Protection Program;
 - d. Minor issues other than those found and corrected during routine monitoring and inspections of potential noncompliance that cannot be resolved in a short period of time (a radiological posting having fallen off of a door is an example);
 - e. Issues that may plausibly lead to other, perhaps more significant, non-compliances (a missing sign needed to post the entrance to a high radiation area might be an example);
 - f. Non-compliances that potentially involve more than one division, center, or section.
3. Additional information, citation references and corrective action will be obtained from the D/C/S SSO.
4. A Draft NTS report will be generated the co-PAAA Coordinator or Alternate, for review by the affected Division/Center/Section SSO, the ES&H Director, and DOE-FSO.
5. Initial submission, update and completed NTS reports will be generated and retained in a PDF format.

6. PDF copies will be electronically distributed to the PAAA Coordinator and Division/Center/Section SSO. It will also be posted on the ES&H website.

REFERENCES

Office of Price-Anderson Enforcement (EH-6) U.S. Department of Energy, Office of Price Anderson Enforcement (EH-6) Noncompliance Tracking System
135 Price Anderson Amendments Act (PAAA) Program Implementation Procedures and Guidance Maintained by the DOE Office of Price-Anderson Enforcement maintained at: <http://www.eh.doe.gov/enforce/index.html>
DOE O231.1A, "Environment, Safety and Health Reporting", August 2003
DOE G231.1-1, "Occurrence Reporting and Performance Analysis Guide", August 2003
DOE G231.1-2, "Occurrence Reporting Causal Analysis Guide", August 2003
DOE M231.1-2, "Occurrence Reporting and Processing of Operations Information", August 2003

Appendix A

NTS Reporting Criteria

Associated with DOE O 231.1-2

SC # is Significance Category number

(See FESHM 3010 for details)

Occupational Injuries or Illness 1. Fatality/terminal illness SC1 2. Inpatient hosp >= 3 pers SC1 3. >= 3 pers having DART case SC2 4. Pers exp > limits requiring med treatment SC 2 5. Pers Exposure > limits SC 3 6. Serious Occupational injury SC 3	Fire Explosions 1. Unplanned fire or related event /explosion within primary confinement/containment barrier SC 1 2. Unplanned fire/explosion in nuclear facility that activates fire suppression system SC 2 3. Unplanned fire/explosion in non-nuclear facility that activates a fire suppression system or takes longer than 10 minutes to extinguish SC 3
Failure of Hazardous Energy Controls 1. Process failure/resulting in burn shock SC 2 2. Process failure/discovery of uncontrolled energy source SC 3.	Near Miss ORPS Group 10 SC 1- 3
Other significant conditions Conditions meeting the criteria of Severity Level 1 (Serious) violations > high relative risk. (OSHA) Contractors who receive a notice of violation while under contract with the Department of Energy must create and submit an NTS report	
Management issues: Repetitive noncompliance, programmatic issues, intentional violation or misrepresentation FNAL analysis of ESHTRK, audits and surveys Identification of trends, patterns or may be of value in the DOE Complex.	

Technical Appendix 3030
Reporting Criteria under NTS
Extract from DOE O 231.1-2

Group 2 - Personnel Safety and Health Subgroup A Occupational Illnesses/Injuries	Group 2 - Personnel Safety and Health Subgroup B Fires/Explosions
<p># SC Criterion (number in bold, underlined) See FESHM 3010 for details</p> <p>(1) <u>SC 1</u> Any occurrence due to DOE operations resulting in a fatality or Terminal injury/illness. For fatalities caused by overexposures, the intent of this criterion is to report those caused by acute rather than chronic effects.</p> <p>(2) <u>SC 1</u> Any single occurrence requiring in-patient hospitalization of three or more personnel.</p> <p>(3) <u>SC 2</u> Any single occurrence resulting in three or more personnel having Days Away, Restricted or Transferred (DART) cases per 29 CFR Part 1904.7. DOE M 231.1-2</p> <p>(4) <u>SC 2</u> Personnel exposure to chemical, biological or physical hazards above limits established by the Occupational Safety and Health Administration (refer to 29 CFR Part 1910) or American Conference of Governmental Industrial Hygienists, whichever is lower, and that requires the administration of medical treatment beyond simple first aid on the same day as the exposure. [29 CFR 1904.7(b)(5)(i) and (ii) define "medical treatment" and "first aid."]</p> <p>(5) <u>SC 3</u> Personnel exposure to chemical, biological or physical hazards above limits established by the Occupational Safety and Health Administration (refer to 29 CFR Part 1910) or American Conference of Governmental Industrial Hygienists.</p> <p>(6) <u>SC 3</u> Any single occurrence resulting in a serious occupational injury. A serious occupational injury is an occupational injury that:</p> <p>(a) Requires hospitalization for more than 48 hours, commencing within 7 days from the date the injury was received;</p> <p>(b) Results in a fracture of any bone (except simple fractures of fingers, toes, or nose, or a minor chipped tooth);</p>	<p># SC Criterion (number in bold, underlined) See FESHM 3010 for details</p> <p>(1) <u>SC 1</u> Any unplanned fire or explosion within primary confinement/containment boundaries for nuclear or hazardous material within a facility.</p> <p>(2) <u>SC 2</u> Any unplanned fire or explosion in a nuclear facility that activates a fire suppression system (e.g., halon discharge, sprinkler heads activating), is extinguished by a fire department, or disrupts normal facility operations.</p> <p>(3) <u>SC 3</u> Any unplanned fire or explosion in a non-nuclear facility that</p> <p>a) Activates a fire suppression system,</p> <p>b) Takes longer than 10 minutes to extinguish following the arrival of fire protection personnel, or</p> <p>c) Disrupts normal operations in a high hazard facility.</p>

(c) Causes severe hemorrhages or severe damage to nerves, muscles, or tendons; (d) Damages any internal organ; or (e) Causes second- or third-degree burns, affecting more than five percent of the body surface	
Group 2 - Personnel Safety and Health Subgroup C Hazardous Energy Control	Group 10 Management Concerns /Issues
<p># SC Criterion</p> <p>(1) SC 2 Failure to follow a prescribed hazardous energy control process (e.g., lockout /tagout) or disturbance of a previously unknown or mislocated hazardous energy source (e.g., live electrical power circuit, steam line, pressurized gas) resulting in a person contacting (burn, shock, etc.) hazardous energy.</p> <p>(2) SC 3 Failure to follow a prescribed hazardous energy control process (e.g., lockout/tagout) or a site condition that results in the unexpected discovery of an uncontrolled hazardous energy source (e.g., live electrical power circuit, steam line, pressurized gas). This criterion does not include discoveries made by zero-energy checks and other precautionary investigations made before work is authorized to begin.</p>	<p># SC Criterion</p> <p>(1) SC 2 Any event resulting in the initiation of a Type A or B accident investigation as categorized by DOE O 225.1A, <i>Accident Investigation</i>.</p> <p>[Note: This reporting criterion may raise the significance category of an occurrence already reported under separate criteria. Multiple reporting criteria should be noted when appropriate.]</p> <p>(2) SC 1-4† An event, condition, or series of events that does not meet any of the other reporting criteria, but is determined by the Facility Manager or line management to be of safety significance or of concern to other facilities or activities in the DOE complex. One of the four significance categories should be assigned to the occurrence, based on an evaluation of the potential risks and the corrective actions taken.</p> <p>[† Note: An SC 1 occurrence report requires Prompt Notification.]</p> <p>(3) 1-4† A near miss, where no barrier or only one barrier prevented an event from having a reportable consequence. One of the four significance categories should be assigned to the near miss, based on an evaluation of the potential risks and the corrective actions taken.</p> <p>[† Note: An SC 1 occurrence report requires Prompt Notification.]</p> <p>(4) SC 4 Any occurrence that may result in a significant concern by affected state, tribal, or local officials, press, or general population; that could damage the credibility of the Department; or that may result in inquiries to</p>

	<p>Headquarters.</p> <p>(5) SC 4 Any occurrence of such significant immediate interest to offsite personnel and organizations that it warrants prompt notification to the DOE Headquarters Operations Center (DOE HQ OC), and which is not already designated elsewhere in this set of reporting criteria to have prompt notification [denoted by having an asterisk (*) next to the significance category].</p>
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.Other significant conditions

OSHA BASED	FNAL IN-HOUSE
<p>Conditions meeting the criteria of Severity Level 1</p> <p>(serious) violations > low relative risk. (OSHA)</p> <p>Contractors who receive a notice of violation while under contract with the Department of Energy must create and submit an NTS report</p>	<p>FNAL analysis of ESHTRK, audits and surveys</p> <p>Identification of trends, patterns or which may be of value in the DOE Complex.</p> <p>Management issues: Repetitive noncompliance, programmatic issues, intentional violation or misrepresentation</p>

Appendix B DECISION FLOWCHART

